

Notice of Allowability

Application No.

10/815,603

Examiner

Tuan N. Nguyen

Applicant(s)

ROSHAN ET AL.

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01/30/2007.
2. ☒ The allowed claim(s) is/are 16-26.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>4/13/2007</u> |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAIL ACTION

Response to Amendment

1. In responding to applicant's amendment filed 01/30/2007, claims 16, 26 have been amended.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below, to the amended claims 1-15, 16, 23 should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview on April 13, 2007 with Mr. Mark D. Saralino (Attorney for Applicant, Reg. No. 434,243).

Claims: 1-15 are canceled

Claim 16:

A semiconductor device comprising:

an active region;

a cladding region; and

a saturable absorbing layer disposed within the cladding region,

wherein the saturable absorbing layer comprises a pattern having one portion that is absorbing for light emitted by the active region and another portion that is not absorbing for light emitted by the active region, the one portion and the another portion each have top and bottom surfaces that are parallel to top and bottom surfaces of the cladding region within which said one

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portion and said another portion are disposed, and the active region is disposed below the saturable absorbing layer.

Claim 23:

A semiconductor device comprising:

an active region;

a cladding region; and

a saturable absorbing layer disposed within the cladding region,

wherein the saturable absorbing layer comprises a pattern having one portion that is absorbing for light emitted by the active region and another portion that is not absorbing for light emitted by the active region,

the semiconductor device is a stripe ridge laser device, and

the saturable absorbing layer comprises a first stripe-shaped non-absorbing portion disposed substantially under and substantially parallel to the stripe ridge, and at least a second non-absorbing portion, said second non-absorbing portion of the saturable absorbing layer not being disposed under the stripe ridge.

REASON FOR ALLOWANCE

Allowable Subject Matter

3. The following is an examiner's statement of reasons for allowance - Applicant's response filed on 01/30/2007 has been considered, with respect to claims 16, and 23 the references of the record fail to teach or suggest a semiconductor device comprising:

Claim 16:

an active region, a saturable absorbing layer disposed within the cladding region, wherein *the saturable absorbing layer comprises a pattern having one portion that is absorbing for light emitted by the active region and another portion that is not absorbing for light emitted by the active region, the one portion and the another portion each have top and bottom surfaces that are parallel to top and bottom surfaces of the cladding region within which said one portion and said another portion are disposed, and the active region is disposed below the saturable absorbing layer.*

Claim 23:

a stripe ridge laser with an active region, a saturable absorbing layer disposed within the cladding region, wherein *the saturable absorbing layer comprises a pattern having one portion that is absorbing for light emitted by the active region and another portion that is not absorbing for light emitted by the active region, the saturable absorbing layer comprises a first-striped-shaped non-absorbing portion disposed under and parallel to the stripe ridge, and a second non-absorbing portion of the saturable absorbing layer not disposed under the stripe ridge.*

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

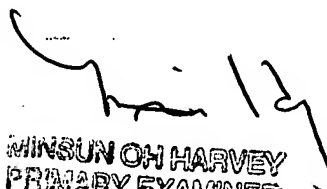
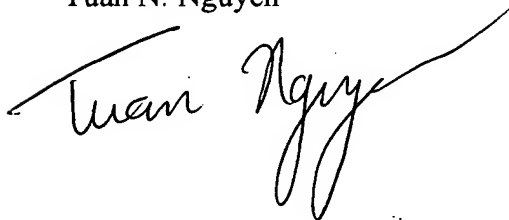
Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N Nguyen whose telephone number is (571) 272-1948. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harvey Minsun can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan N. Nguyen



HARVEY MINSUN
PRIMARY EXAMINER